

REMARKS/ARGUMENTS

After the foregoing Amendment, claims 1, 2, 5-14, 16, 17, 19, 21, 22, 25-36, 39, and 42 are currently pending in this application. Claims 1, 21, and 42 are amended.

Examiner Interview

The Applicant thanks the Examiner for granting a telephonic interview with the undersigned Applicant's representative on June 29, 2011. During the telephonic interview, agreement was reached that the claim amendments filed in this response distinguish over currently cited references and will, at least, advance the prosecution.

Claim Rejections - 35 USC §103

Claims 1, 2, 11-14, 16, 17, 19, 21, 22, 31-36, 39 and 42 stand rejected under 35 U.S.C. § 103(a) as being obvious over Kong et al. (U.S. Patent No. 6,700,881, hereinafter Kong) in view of Bucher (U.S. Patent No. 5,621,737, hereinafter Bucher). Claims 5-7 and 25-27 stand rejected under 35 U.S.C. § 103(a) as obvious over Kong, Bucher and Watanabe (U.S. Pub. No. 2001/0041584, hereinafter Watanabe). Claims 8-10 and 28-30 stand rejected under 35 U.S.C. § 103(a) as

obvious over Kong, Bucher and Ryu (U.S. Patent No. 6,430,244, hereinafter Ryu).
The Applicant respectfully disagrees for the following reasons.

The Applicant respectfully submits that all of the claims are, in fact, patentable over the cited references for the following reasons. Claim 1 recites at least the following elements which are not taught, suggested, or in any way rendered obvious by the cited references, namely:

instantaneously detecting motion of a communication device communicating the wireless signal or instantaneously detecting motion of an external object in a signal path based on a measurement of a metric of a modulated signal attribute comprised of at least one of amplitude of the wireless signal, frequency of the wireless signal, or phase of the wireless signal;

selecting a parameter adjustment, based on the instantaneously detected motion, of at least one of: an antenna mode, a power level, a forward error correction (FEC) coding rate, a number of modulation symbols, and a data transfer rate

(emphasis added). Claim 1, as amended, is supported in numerous locations throughout the Applicant's specification, all of which establish that motion of a communication device or an external object is being detected while the motion is occurring, in contrast to the cited references. For example, the paragraph beginning on page 14, line 28 states: "Fig. 6B is a plot of the instantaneous AGC signal output from the AGC 610 (Fig. 6A). As shown, the instantaneous AGC signal 665 shows no indication of rapid changes in the signaling path between the mobile station 105 and the base station 120. However, after time T_v , the instantaneous AGC signal

665 shows an indication that rapid changes are taking place between the mobile station 105 and the base station 120. Accordingly, a no_rapid_change zone 680 and a rapid_change zone 685 are indicated to show the point at which the instantaneous AGC signal 665 indicates that a rapid change has occurred.” (Emphasis added.) Figure 6B clearly shows a horizontal time axis. Every point on this axis represents an instant of time. The vertical axis represents the value of the AGC signal. The continuous curve 665 indicates a value of the AGC signal for each instant of time on the horizontal axis. As described, the instantaneous AGC signal is an indicator of instantaneous motion. Further indication that instantaneous motion is being detected may be seen in the frequent use of the present tense in the above quoted paragraph, such as “rapid changes are taking place”.

By contrast, Kong does not teach, suggest, or in any way render obvious the above quoted elements of claim 1. For example, the recitation in claim 1 “instantaneously detecting motion of a communication device communicating the wireless signal or instantaneously detecting motion of an external object in a signal path” is absent in Kong. Kong is directed only to the effects of distance between a transmitter and a receiver and the resulting weak signal. Kong contains no teaching of instantaneous detection of changes of distance over time while the change in distance is actually occurring. Bucher does not remedy the above deficiencies of Kong. At least because Kong does not disclose “instantaneously

detecting motion of a communication device communicating the wireless signal or instantaneously detecting motion of an external object in a signal path” based on bit error rate (BER), Bucher’s teaching regarding estimating BER is irrelevant. Furthermore, Bucher alone is relied upon to teach “a measurement of a metric of a modulated signal attribute comprised of at least one of amplitude of the wireless signal, frequency of the wireless signal, or phase of the wireless signal” in claim 1. However, the Applicant maintains that Bucher does not contain this teaching, at least because the error magnitudes used in Bucher are errors between I and Q components of a burst, and not from a “wireless signal.” *See, e.g.*, Bucher col. 3, lines 45-51 (stating “signal 12 represents a burst, rather than a continuous signal, and is referred to as burst 12 below. . . . Data may be conveyed through relative phase relationships between I and Q quadrature components of signal or burst 12 using any of many well known data modulation techniques”).

For all of the reasons presented above, claim 1 is patentable over the combination of Kong and Bucher. Independent claims 21 and 42 recite elements corresponding to those of claim 1 and are therefore also patentable over Kong and Bucher for corresponding reasons.

All other pending claims are each dependent on one of claims 1, 21, or 42, and are therefore also patentable over Kong and Bucher.

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Application No.: 09/772,176

Regarding claims 5-7 and 25-27, Watanabe does not remedy the deficiencies of Kong and Bucher. Watanabe discloses a radio receiver and a method of amplifying various types of signals in the receiver to reduce power consumption. Watanabe is silent concerning the above discussed elements of claims 1, 21 and 42.

Regarding claims 8-10 and 28-30, Ryu does not remedy the deficiencies of Kong and Bucher. Ryu discloses a phase-locked loop circuit and is silent concerning the above discussed elements of claims 1, 21 and 42.

Based on the arguments presented above, withdrawal of the rejection of all pending claims under 35 USC §103(a) over the cited references is respectfully requested.

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephonic interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, the Applicant respectfully submits that the present application is in condition for allowance and a notice to that effect is respectfully requested.

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Respectfully submitted,

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Enclosure